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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/715,878	11/17/00	RIVELLI	P 5877-001.30

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QM22/1108

EXAMINER	
HO,U	
ART UNIT	**PAPER NUMBER**
3731	7

DATE MAILED: 11/08/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No.	Applicant(s)	
	09/715,878	Rivelli Jr.	
	Examiner	Art Unit	
	(Jackie) Tan-Uyen T. Ho	3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11/17/2001* .

2a)☐ This action is FINAL. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) *13-17* is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☒ Interview Summary (PTO-413) Paper No(s). 7 .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Claim Objections

1. Claim 4 is objected to because of the following informalities: In line 1, "austentile should be --austenite--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Schnepp-Pesch et al. (5,860,999).

In regard to claims 1 and 5, Schnepp-Pesch et al. disclose a stent (figs. 1-2) including a plurality of expandable tubular members (2a, 2b), each member being composed of a continuous wire element forming a plurality of wave segments, each segment including a pair of looped peaks (3, 3a); axial connectors (4, 4a) joining adjacent tubular members from confronting peaks of the adjacent members (fig. 2); wherein radial expansion of the stent is accommodated by movement of adjacent wave-segment peaks away from one another (fig. 2).

4. Claims 1-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Duerig et al. (6,190,406).

In regard to claims 1, 2 and 5, Duerig et al. disclose a NiTi stent (fig. 3, col. 5, lines 10-43) including a plurality of expandable tubular members (52a-52d), each member being composed of a continuous wire element forming a plurality of wave segments, each segment including a pair of looped peaks (62); axial connectors (70) joining adjacent tubular members from confronting peaks of the adjacent members (fig. 3); wherein radial expansion of the stent is accommodated by movement of adjacent wave-segment peaks away from one another (fig. 5).

In regard to claims 3-4, the stent of claim 2 has a stress-induced martensite phase at body temperature and an austenite phase transition temperature below body temperature (col. 8, lines 40-52).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 6-10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duerig et al. (6,190,406). Although, Duerig et al. do not disclose a catheter for carrying a stent in contracted state having a lumen inner diameter between about 0.5 and 2 mm and a diameter of the stent in its contracted state being

between .5 and 2 mm and in its expanded state being 2-9 times that in its contracted state, it is a well-known that the diameter of a human blood vessel can be 2-3 mm to about 8 mm. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the Duerig et al. stent and catheter having such diameters as claimed, in order to accommodate the target vessel as small as 2-3 mm or as large as 8 mm in diameter.

7. Claims 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schnepp-Pesch et al. (5,860,999) and Parodi (5,954,764). Schnepp-Pesch et al. disclose a stent, as claimed, for treat an abnormal vessel. Parodi discloses a catheter system adapted to delivery the Schnepp-Pesch et al. stent to a target abnormal vessel or an aneurysm. .The Parodi catheter including a pusher (14) having a stabilizer (114). Although, Schnepp-Pesch et al. do not disclose the catheter in contracted state having a lumen inner diameter between about 0.5 and 2 mm and Parodi does not disclose a diameter of the stent in its contracted state being between .5 and 2 mm and in its expanded state being 2-9 times that in its contracted state, it is a well-known that the diameter of a human blood vessel can be 2-3 mm to about 8 mm. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the Schnepp-Pesch et al. catheter and the Schnepp-Pesch stent having such diameters as claimed, in order to accommodate the target vessel as small as 2-3 mm or as large as 8 mm in diameter.

Allowable Subject Matter

8. Claims 13-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter: the prior art fails to disclose or suggest the step of replacing the guide wire with a pusher wire of the method for treating an aneurysm, as claimed.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Mathis et al. (6,129,755) disclose a NiTi stent including a plurality of tubular members; connectors connecting confronting peaks of adjacent tubular members.

Kleshinski et al. (5,902,317 and 5,540,712) and Frantzen et al. disclose NiTi stents having a stress-induced martensite phase at body temperature and an austenite phase transition temperature below body temperature.

Marks (5,217,484) discloses a method and device for treating an aneurysm. The method includes the steps of guiding a catheter to a target site by a guide wire and replacing a guide wire with a pusher to push an implant from the catheter to the aneurysm.

Solovay et al. (6,290,731) disclose a method and device for treating an abnormal vessel. The device includes a catheter, a guide wire, a pusher and

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to (Jackie) Tan-Uyen T. Ho whose telephone number is (703)306-3421. The examiner can normally be reached on M-F 8:00-5:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Recla can be reached on (703)308-1382. The fax phone numbers for the organization where this application or proceeding is assigned are (703)305-3590 for regular communications and (703)305-3590 for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0858.

(Jackie) Tan-Uyen T. Ho
November 1, 2001

Henry J. Recla
Supervisory Patent Examiner
Group 3700